AMENDMENT TO THE CLAIMS:

The following claim set replaces all prior versions, and listings, of claims in the application:

1. (currently amended) A portable device for the production of electrical energy, comprising a matrix of one or more conversion modules, operating in series or in parallel, wherein each of the conversion modules comprises:

a combustion chamber having an outer surface defining a substantially spherical shape and made of material that is able to withstand high temperatures,

an external lining having a selective radiation emissivity in a predetermined wavelength on the outer surface of the combustion chamber,

means for supplying a combustion support substance into the combustion chamber,

means for the removal of gaseous combustion products,

means for igniting the combustion reaction,

an injection device connected to said combustion chamber by means of an injection conduit to inject the combustion support substance into the combustion chamber,

a controller for controlling ~~of the~~ injection frequency of the combustion support substance into the combustion chamber to thereby control ~~and hence of generated~~ power generated by the combustion chamber,

~~means for the selective emission of radiation onto an outer surface of the combustion chamber,~~

a conversion chamber ~~having a semi-ellipsoidal shape~~ within which sub-atmospheric pressure conditions are maintained, wherein the conversion chamber includes:

(i) an elliptical wall having an interior radiation-reflective surface in the shape of an ellipsoid defining a focus region for focusing radiation reflected thereby; and

(ii) a planar wall coincident with a plane passing through a center of the ellipsoid and perpendicular to a major axis thereof so as that the conversion chamber has a semi-ellipsoidal shape, wherein the planar wall includes energy-conversion means on an interior surface thereof for converting radiant energy into electrical energy, and wherein

the combustion chamber is enclosed within the conversion chamber and is positioned in correspondence with [[a]] the focus region defined by the elliptical wall of said ellipsoid, wherein ~~and means for the conversion of radiant energy into electrical energy, positioned on a planer surface of the conversion chamber that is perpendicular to a greater axis of the ellipsoid and passes through the center of the ellipsoid~~

radiation emitted by the combustion chamber and reflected by the energy conversion means on the interior surface of the planar wall and radiation emitted by the combustion chamber and reflected by the radiation reflective inner surface of the elliptical wall are concentrated on the outer surface of the combustion chamber for re-absorption by the external lining thereof.

2. (canceled)

3. (canceled)

4. (currently amended) A system as claimed in claim 1, wherein said energy conversion means ~~for the conversion of radiant energy into electrical energy~~ comprise a plurality of photovoltaic cells.

5. (currently amended) A system as claimed in claim 1, wherein the external lining has ~~said means for the selective emission of radiation have~~ a narrow emission band with a peak in correspondence with the wavelength at which the energy-conversion means have the maximum conversion efficiency.

6. (currently amended) A system as claimed in claim 1, wherein the external lining is ~~said means for the selective emission of radiation comprise a lining applied onto the outer surface of the combustion chamber, said lining being constituted by~~ a material selected from the group consisting of ~~in the group comprising:~~ micro-structure metal, metallic or dielectric photonic crystal, oxide or mixture of oxides of rare earths.

7. (previously presented) A system as claimed in claim 1, wherein the outer surface of the combustion chamber has a total area such that the radiant energy emitted by the emission means is equal to the sum of the total thermal energy developed by the combustion reaction at steady state and of [[the]] that fraction of radiant energy that is reflected by the inner walls of the conversion chamber or by the conversion means and reabsorbed by the combustion chamber.

8. (previously presented) A system as claimed in claim 1, wherein said conversion chamber has axes whose size ranges between 3 and 50 times the diameter of the combustion chamber.

9. (previously presented) A system as claimed in claim 1, wherein said injection device is a head of the ink-jet type.

10. (previously presented) A system as claimed in claim 9, wherein said injection head is of the "bubble" ink-jet type.

11. (previously presented) A system as claimed in claim 9, wherein said injection head is piezoelectric.

12. (previously presented) A system as claimed in claim 1, wherein the combustion chamber is constituted by material with high thermal conductivity and able to withstand high temperatures.

13. (previously presented) A system as claimed in claim 12, wherein part of the inner surface of the combustion chamber is coated with a porous layer of material with low thermal conductivity and able to withstand high temperatures.

14. (previously presented) A system as claimed in claim 13, wherein the porosities of said porous layer are coated by a catalysing material serving the purpose of lowering the activation temperature of the combustion reaction and of limiting the generation of noxious combustion products.

15. (previously presented) A system as claimed in claim 12, wherein the combustion chamber is made of metallic material.

16. (previously presented) A system as claimed in claim 15, wherein said metallic material is constituted by tungsten or molybdenum.

17. (previously presented) A system as claimed in claim 1, wherein said injection conduit and said means for supplying the combustion support substance and said means for extracting the combustion gases are made of a material with low thermal conductivity.

18. (previously presented) A system as claimed in claim 17, wherein an that the outermost segment of the exhaust conduit is made of a material with high thermal conductivity to allow combustion products to yield the residual heat before exiting the conversion chamber.

19. (previously presented) A system as claimed in claim 1, wherein the injection conduit and the means for injecting the combustion support substance independently end into the combustion chamber.

20. (previously presented) A system as claimed in claim 1, wherein the means for the injection of the combustion support substance end into the injection conduit before entering the combustion chamber.

21. (previously presented) A system as claimed in claim 1, wherein the conversion chamber is formed within a structure made of optically polished metallic material.

22. (previously presented) A system as claimed in claim 1, wherein the conversion chamber is defined within a structure made of plastic or ceramic material and coated with a layer of material with high reflectance.

23. (previously presented) A system as claimed in claim 4, wherein a surface of said photovoltaic cells facing the interior of said conversion chamber is coated with an optical lining operating on the long wavelengths of the electromagnetic radiation as a band pass filter with transmittance peak in correspondence with the wavelength at which the photovoltaic cells have the maximum conversion efficiency.

24. (previously presented) A system as claimed in claim 4, wherein said photovoltaic cells are based on Schottky junctions.

25. (previously presented) A system as claimed in claim 24, wherein said Schottky junctions are made of silicon and aluminium.

26. (previously presented) A system as claimed in claim 23, wherein said optical lining is made of a material selected from the group comprising: multilayer dielectric lining, metallic lining at the percolation state, metallic photonic crystal, anti-reflection micro-structure.

27. (previously presented) A system as claimed in claim 1, wherein the injection device is constituted by a miniaturised Bunsen burner.

28. (previously presented) A system as claimed in claim 17, wherein the gaseous fuel injected by said injection device belongs to the group comprising: methane, propane, butane, hydrogen, natural gas.

29. (previously presented) A system as claimed in claim 1, wherein the exhaust conduit is internally coated with catalysing material able to neutralise the noxious products of the combustion reaction.

30. (previously presented) A system as claimed in claim 1, wherein the exhaust conduit has an articulated path in order to favour the cooling of the exhaust gas.

31. (previously presented) A system as claimed in claim 1, wherein the injection conduit has an articulated path in order to prevent the combustion products to return towards the injection means.

32. (previously presented) A system as claimed in claim 1, wherein said ignition means are electrical and the combustion is started by an electrical discharge, by a spark or by an incandescent filament.

33. (currently amended) A system as claimed in claim 1, wherein vacuum is obtained inside the conversion chamber ~~(20)~~.

34. (currently amended) A system as claimed in claim 1, wherein inside the conversion chamber ~~(20)~~ is contained an inert gas at sub-atmospheric pressure.

35. (previously presented) A system as claimed in claim 1, wherein the conversion chamber is constituted by optically polished metallic material.

36. (previously presented) A system as claimed in claim 33, wherein the conversion chamber is constituted by optically polished ceramic material.

37. (previously presented) A system as claimed in claim 1, wherein the inner wall of the conversion chamber is coated by a layer having high reflectance over the whole spectrum of the radiation emitted by the emission means.